

## Sigmoidoscopy – a necessary procedure in the routine investigation of homosexual men?

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**SUMMARY** In a study to assess the value of sigmoidoscopy in the routine investigation of homosexual men, this procedure was undertaken on 1118 men who attended a sexually transmitted diseases clinic as “new” or “return new” patients. Serious rectal disease was not identified in any of the 557 men who were symptomless at the initial attendance. Though the extent of the proctitis diagnosed in 166 men would not have been defined, 99% (465) of 470 anorectal lesions would have been identified if proctoscopy alone had been performed. It is concluded that sigmoidoscopy does not have a role in the routine investigation of homosexual men.

### Introduction

As anal intercourse is practised widely by homosexual men, they are susceptible to a wide range of anorectal disorders, including infectious and traumatic lesions.<sup>1</sup> In addition, enteric pathogens, particularly *Entamoeba histolytica* and *Giardia intestinalis*, may be acquired by oroanal sexual contact.<sup>2</sup> Though proctoscopy (anoscopy) is usually a routine procedure in the clinical examination of homosexual men who attend clinics for the management of sexually transmitted diseases (STD), only the anal canal and distal 2-3 cm of the rectum can be visualised satisfactorily. As the penis and hand can reach higher into the rectum than the proctoscope, it would seem reasonable to undertake sigmoidoscopy on men who have had receptive anal intercourse. The aim of the present study was to investigate the value of sigmoidoscopy in the routine examination of men who have been the recipient partners during anal intercourse.

### Patients and methods

Men who attended this department of genitourinary medicine as new or “return new” patients consecutively from January 1981 to December 1985, and who gave a history of being the recipient partner during homosexual anal intercourse were studied. A careful history including specific questioning about

gastrointestinal symptoms was taken from each patient, and general physical examination was performed. The appropriate material was collected for microbiological examination as detailed elsewhere.<sup>3</sup> In patients with proctitis, in whom the initial investigations yielded negative results, these tests were repeated one week later. After obtaining the patient's consent, sigmoidoscopy was undertaken using a plastic disposable sigmoidoscope (Welch-Allyn, New York, USA). Before this examination, the patient was asked to defaecate, and only in exceptional cases was it necessary to use an enema.

The appearance of the rectal mucosa was recorded and, using the criteria suggested by Watts *et al*,<sup>4</sup> a diagnosis of proctitis was made if the normal vascular pattern was absent and if on overall assessment the rectal mucosa was abnormal. During the first two years of the study, rectal biopsies were undertaken when the rectal mucosa looked abnormal. In the subsequent three years, biopsy specimens were obtained only from patients with proctitis in whom an organismal cause could not be identified. Rectal biopsy specimens from at least two sites were taken using Patterson's biopsy forceps. A histological diagnosis of proctitis was made as described elsewhere.<sup>5</sup>

The study was approved by the South Lothian District Ethical Committee.

### Results

Sigmoidoscopies were undertaken at the initial clinic attendance of 1118 homosexual men who presented as “new” or “return new” patients. Details on a further 146 men in whom an adequate sigmoidoscopic examination could not be performed, are not

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presented. The median age was 26.2 (range 17 to 73) years. Tables I and II show the intestinal symptoms and eventual diagnoses made in these patients. At the time of sigmoidoscopy, 557 men were symptomless.

TABLE I Symptoms\* referable to intestinal tract in 1118 homosexual men studied

Symptoms	No of men affected
Diarrhoea †	341
Anorectal bleeding	277
Anal discharge	132
Pruritus ani	396
Anal pain	58

\*Some men had more than one symptom, and presented on two or more occasions with symptoms.

† Passage of loose stools on at least three occasions for at least 24 hours.

TABLE II Anal and intestinal disorders diagnosed in 1118 men who underwent sigmoidoscopy on at least one occasion

Diagnosis	No of men affected*
Rectal gonorrhoea	96
Early syphilis	29 †
Rectal chlamydial infection	11
Anorectal herpes simplex virus infection	18
Amoebiasis	63
Giardiasis	46
Shigellosis	1
Campylobacter infection	1
Crohn's disease	1
Anal warts	431
Anal fissures	12
Solitary ulcer	1
Traumatic ulceration of rectal mucosa	2
Metaplastic polyp	2
Juvenile polyp	1

\*Some men had more than one infection.

† Includes four men who had primary syphilis of the anal canal.

A diagnosis of proctitis based on the macroscopic appearance of the rectal mucosa was made in 166 men, each of whom had anorectal symptoms. In most cases (128 of 133 men from whom rectal biopsy specimens had been obtained) the histology confirmed the macroscopic findings. Table III shows the association of proctitis with various organisms. Inflammatory changes confined to the distal rectum and visible during proctoscopy were noted in 49% (41) of 83 men with rectal gonorrhoea, 25% (two) of eight patients with rectal chlamydial infection, 5% (one) of 21 men with early syphilis, and 89% (16) of 18 men with anorectal herpes; 6% (53) of 863 patients in whom intestinal infection was not diagnosed, had distal proctitis. In general, the inflammatory changes associated with *Neisseria gonorrhoeae*, *Chlamydia trachomatis*, and herpes simplex virus were confined to the distal rectum, whereas those associated with infection with *Shigella flexneri*, *Campylobacter jejuni*, and *E histolytica* tended to extend beyond the rectosigmoid junction. An organismal cause of the proctitis noted in 56 patients was not found. In 55 cases the histology was that of acute infective proctitis, and when these patients were examined one month later the proctitis had resolved spontaneously; one patient who had perianal sinuses had Crohn's disease of the rectum.

In one patient who gave a two year history of intermittent anorectal bleeding, a solitary ulcer, 1.5 cm in diameter, was identified on the anterior wall of the rectum 7 cm from the dentate line. Two men presented with rectal bleeding that occurred within three hours of "fisting"; both patients had mucosal lacerations of the rectal wall situated 6 and 12 cm from the anal margin respectively. From the posterior wall of the rectum, 12 cm from the dentate line, a "juvenile" polyp, 1 cm in diameter, was removed from one symptomless patient. Multiple metaplastic polyps were noted on the rectal mucosa of two symptomless men.

TABLE III Extent of proctitis associated with particular infections

Infecting organism	No* of patients	No with proctitis:	
		Confined to within 15cm of dentate line	Extending 15cm or more from dentate line
<i>Neisseria gonorrhoeae</i>	83	41	
<i>Chlamydia trachomatis</i>	8	2	1 †
<i>Treponema pallidum</i>	21	1	1
Herpes simplex virus	18	16	
<i>Entamoeba histolytica</i>	54		21
<i>Shigella flexneri</i>	1		1
<i>Campylobacter jejuni</i>	1		1
No intestinal infection diagnosed	863	53	3

\*Patients with multiple intestinal infections have been excluded from this analysis.

† Infected with *C trachomatis* serotype lymphogranuloma venereum type 2.

## Discussion

When the results of the appropriate microbiological investigations are not available, the diagnosis of proctitis in homosexual men has presented difficulties. Valuable information can be obtained, however, by consideration of the patient's history and the findings on sigmoidoscopy. In the present study, organisms that had been acquired directly by anal intercourse tended to produce distal proctitis, whereas the enteric pathogens transmitted by the oroanal route were more likely to be associated with a proctocolitis (*G. intestinalis*, however, is not associated with colitis). Similar findings were reported by Quinn *et al.*<sup>6</sup> Though the results of sigmoidoscopy may give a clue as to the likely causes of proctitis and permit a rational empirical choice of antimicrobial agent, mixed infections are common<sup>6</sup> and microbiological investigations are mandatory. As these results are usually available within a few days, the role of sigmoidoscopy in the investigation of infective proctitis, the most likely cause of proctitis in men who have had receptive anal homosexual contact, is negligible.

In the present series of cases, serious rectal disease was not identified in any symptomless patient. Two men had metaplastic polyps, which are common and of no clinical importance,<sup>7</sup> and the other had a benign inflammatory ("juvenile") polyp,<sup>8</sup> the development of which may have been related to rectal trauma during fist fornication. Three patients who presented with anorectal bleeding had ulceration of the rectal mucosa that could not have been visualised through a proctoscope. Two men had rectal lacerations after fisting, and one had a solitary ulcer, the aetiology of which is obscure but may be related to repeated trauma.<sup>9</sup> As these men had a clear indication for sigmoidoscopy, this procedure would have been undertaken anyway.

Most anorectal disorders that are related to anal intercourse occur within the anal canal or the distal 2-3 cm of the rectum (table II) and can be identified by careful proctoscopy, a procedure that should always be undertaken when examining men who have had homosexual anal intercourse.

As sigmoidoscopy is time consuming, unpleasant for the patient, and is occasionally complicated by laceration of the rectal mucosa, I think that it does not have a role in the routine investigation of homosexual men and is indicated only in patients with intestinal symptoms for which there is no apparent cause.

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